

# Mineral Industry Surveys

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# **IRON ORE IN APRIL 2005**

U.S. mine production of iron ore in April 2005, on a daily average basis, was 2.8% higher than that of the prior month, according to the U.S. Geological Survey. Average daily production was 141,000 metric tons per day (t/d), 3,800 t/d more than the figure for March 2005.

Shipments in April 2005, on a daily basis, were almost double those of March 2005, because the Upper Lakes shipping season did not begin until mid-March. Mine stocks at the end of April were 0.7 million metric tons less than the corresponding stocks figure on March 31, a decrease of 8.6%.

U.S. imports of iron ore in March 2005 were 2.5 times greater than exports, with imports exceeding exports by 511,000 metric tons.

**Prices.**—Latin American steel traders indicated that steelmakers in a number of countries were considering joint efforts to renegotiate 2005 iron ore prices. The possibility of this joint effort is being fueled by recent steel price reductions and the prospect of further steel product price reductions as inventories continue to build (Metal Bulletin, 2005).

**Exploration and Development.**—Fortescue Metals Group Ltd's (FMG) iron ore project in Western Australia's Pilbara region (see Iron Ore in February 2005) continued along its controversial path toward development (Barta, 2005). Details of ore reserves provided by FMG were questioned by the Australian Stock Exchange, while the company increased its drilling budget for the quarter beginning in April by A\$4 million to A\$11 million (Mining Journal, 2005).

FMG recently upgraded its resource estimate with more than one-half of the 1.14 billion metric tons of ore being moved from inferred to indicated reserves under the Joint Ore Reserves Committee (JORC) classification system. An aggressive drilling campaign is being followed to add as much reserves as possible to the measured and indicated classification for use in the definitive feasibility study scheduled for completion by yearend (Sydney Morning Herald, The, 2005§¹).

Domestic Update.—Keewatin Taconite (U.S. Steel

<sup>1</sup>A reference that includes a section mark (§) is found in the Internet Reference Cited section.

Corporation) planned to add coal and petroleum coke as alternative fuel to its current natural gas system and a wet scrubber system at its taconite pelletizing plant owing to high natural gas prices, while the scrubber will remove dust from air emissions. The scrubber is expected to be operational in September, followed by the alternative fuel system in November at a combined cost of \$38 million.

Minntac (U.S. Steel Corp.) announced improvements including a \$5-million cyclone preclassification project to reduce flotation chemical needs, pellet balling process enhancements, and a planned \$22-million scrubber project. Pellet capacity expansion at both Keewatin Taconite and Minntac was being considered to provide feed for a blast furnace expansion underway at the parent company's Gary (IN) Works. The \$260-million rebuilding of the No. 13 blast furnace, planned for completion by November 2005, was expected to raise furnace capacity by more than 1,960 t/d to 8,350 t/d (Kirk, 2005; Forsaker and others, 2005).

### **References Cited**

Barta, Patrick, 2005, Entrepreneur mines China's demand for steel products: Wall Street Journal, May 27, p. A1, A7.

Forsaker, Chris, and others, 2005, General managers' session in Global Demand—A Window of Opportunity: Annual Meeting—SME Minnesota Section, 78th, Duluth, MN, April 19-20, 2005, Proceedings compact disc. Kirk, William, 2005, Global iron ore round-up: Skillings Mining Review, v. 94, no. 6, June, p. 10-11.

Metal Bulletin, 2005, Mills may try to renegotiate iron ore prices, traders claim: Metal Bulletin, no. 8895, May 30, p. 27.

Mining Journal, 2005, Fortescue chided by ASX: Mining Journal, April 29, p.

# **Internet Reference Cited**

Sydney Morning Herald, The, 2005 (June 2), Fortescue shares up on resource upgrade, accessed June 2, 2005, via URL http://www.smh.com.au/news.

TABLE 1
U.S. PRODUCTION AND SHIPMENTS OF IRON ORE<sup>1, 2</sup>
(Exclusive of ore containing 5% or more of manganese)

# (Thousand metric tons)

	Pro	duction	Shi	pments
Period	Monthly	Year to date	Monthly	Year to date
2004:				
April	4,630	17,300	5,260	13,100
May	4,800	22,100	5,300	18,400
June	4,470	26,500	5,880	24,200
July	4,950	31,500	5,550	29,800
August	4,500	36,000	5,670	35,500
September	4,420	40,400	5,420	40,900
October	5,110	45,500	4,780	45,700
November	4,730	50,200	5,110	50,800
December	4,450	54,700	5,150	55,900
2005:				
January	4,420	4,420	3,350	3,350
February	3,870	8,290	1,150	4,500
March	4,240	12,500	2,610	7,110
April	4,220	16,800	4,940	12,100

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits.

 $\label{eq:table 2} \textbf{U.S. PRODUCTION, SHIPMENTS, AND STOCKS OF IRON ORE IN APRIL }^{1,\,2}$ 

# (Thousand metric tons)

	Produ	Production		Shipments <sup>3</sup>		Stocks <sup>4</sup>	
State	2005	2004	2005	2004	2005	2004	
Michigan	1,100	1,180	1,030	1,270	1,970	1,970	
Minnesota	3,120	3,460	3,910	3,990	5,720	6,400	
Total	4,220	4,630	4,940	5,260	7,690	8,360	

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Excludes byproduct ores.

<sup>&</sup>lt;sup>2</sup>Excludes byproduct ore.

<sup>&</sup>lt;sup>3</sup>Includes rail and vessel.

<sup>&</sup>lt;sup>4</sup>Includes mines, plants, and loading docks.

 $\label{eq:table 3} \textbf{CANADA: SHIPMENTS OF IRON ORE}^1$ 

### (Thousand dry metric tons)

		British		
Period	Newfoundland	Quebec	Columbia	Total
2004:				
March	1,250	1,030	6	2,290
April	1,650	858	5	2,520
May	1,920	1,740	7	3,660
June	1,970	981	8	2,960
July	1,710	1,380	10	3,110
August	698	1,120	8	1,830
September	124	1,220	5	1,350
October	635	1,570	7	2,210
November	1,390	958	10	2,360
December	1,370	944	9	2,330
Year total	14,900	13,200	87	28,300
2005:				
January	1,210	1,070	8	2,280
February	928	748	8	1,680
March	1,460	873	10	2,340
1				

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: Natural Resources Canada.

TABLE 4 PRODUCTION OF PIG IRON AND RAW STEEL IN THE UNITED STATES, BY TYPE OF FURNACE  $^{1,2}$ 

# (Thousand metric tons)

	Pig iron	production,	Raw steel production				
	blast	furnace	Basic oxy	gen furnace <sup>3</sup>	Electr	ic furnace	
Period	Monthly	Year to date	Monthly	Year to date	Monthly	Year to date	
2004:							
March	3,630	10,200	4,100	11,500	4,270	12,300	
April	3,400	13,600	3,840	15,300	4,230	16,500	
May	3,400	17,000	3,780	19,100	4,560	21,100	
June	3,390	20,400	3,790	22,900	4,340	25,400	
July	3,370	23,700	3,800	26,700	5,010	30,400	
August	3,490	27,200	3,830	30,500	4,620	35,100	
September	3,400	30,600	3,020	33,500	5,370	40,400	
October	3,570	34,200	3,030	36,600	5,630	46,100	
November	2,140	36,300	5,520	42,100	2,580	48,600	
December	4,270	40,600	3,810	45,900	4,390	53,000	
2005:							
January	3,420	3,420	3,890	3,890	4,390	4,390	
February	3,260	6,680	3,710	7,590	3,930	8,320	
March	3,660	10,300	4,040	11,600	4,150	12,500	

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Inconsistencies in 2004 year-to-date figures for pig iron and raw steel production reflect consolidated revisions for previous months.

<sup>&</sup>lt;sup>3</sup>Raw steel production figures for the basic oxygen process are usually greater than the corresponding pig iron production figures because scrap is routinely melted in the basic oxygen furnace together with the molten pig iron.

 ${\rm TABLE}~5$  U.S. EXPORTS OF IRON ORE, BY COUNTRY OF DESTINATION AND  ${\rm TYPE}^{1,\,2}$ 

# (Thousand metric tons)

Country of destination		2004		2005	5	
and type of product	4th quarter	January-December	January	February	March	1st quarter
Canada	1,710	7,830	807	139	338	1,280
China	26	297				
Mexico	2	4	(3)	(3)	(3)	1
Slovakia		187				
Trinidad and Tobago		29				
Other	1	53	(3)	(3)	(3)	(3)
Total	1,740	8,400	807	139	338	1,280
Pellets	1,700	8,100	806	137	336	1,280
Concentrates	2	25	(3)	1	1	2
Direct shipping ores	30	264	(3)	(3)	(3)	(3)
Other	3	6	(3)	1	1	2
Total	1,740	8,400	807	139	338	1,280

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Less than 1/2 unit.

TABLE 6 U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY COUNTRY AND TYPE  $^{1,2}$  (Exclusive of ore containing 20% or more manganese)

-			2005			2004
	Ma	ırch		Year to date		January-March
	Thousand	Value <sup>3</sup>	Thousand	Value <sup>3</sup>	Value <sup>3</sup>	Thousand
Country of origin	metric	(thousand	metric	(thousand	(dollars	metric
and type of product	tons	dollars)	tons	dollars)	per ton)	tons
Australia						(4)
Brazil	430	16,900	1,200	40,400	33.59	1,170
Canada	365	17,700	669	29,600	44.28	627
Chile	50	2,210	131	4,350	33.06	59
China			(4)	2	263.13 5	
Finland	3	144	3	144	50.07	4
Greece			13	243	18.80	
Mexico	2	50	3	76	25.00	26
Paraguay			4	68	16.80	
Peru			(4)	4	18.04	15
Russia			99	8,550	86.00 <sup>6</sup>	
South Africa						(4)
Spain						(4)
Trinidad and Tobago			368	10,700	29.09	
Venezuela			14	499	36.00	21
Total	849	36,900	2,510	94,600	37.75	1,930
Concentrates	58	2,410	140	4,540	32.55	128
Coarse ores	3	144	21	710	34.21	(4)
Fine ores	214	6,640	953	26,100	27.44	541
Pellets	542	26,500	1,360	61,900	45.51	1,230
Briquettes						21
Other agglomerates	32	1,290	33	1,320	39.79	(4)
Roasted pyrites						4
Total	849	36,900	2,510	94,600	37.75	1,930

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

TABLE 7
U.S. IMPORTS FOR CONSUMPTION OF IRON ORE IN MARCH 2005<sup>1, 2</sup>
(Exclusive of ore containing 20% or more manganese)

### (Thousand metric tons)

			Type o	f product			
					Briquettes		
		Coarse	Fine		and other	Roasted	
Country of origin	Concentrates	ores	ores	Pellets	agglomerates	pyrites	Total
Brazil			79	351			430
Canada	- 8		136	191	30		365
Chile	50						50
Finland		3					3
Mexico					2		2
Total	58	3	214	542	32		849

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Customs value. Excludes international freight and insurance charges.

<sup>&</sup>lt;sup>4</sup>Less than 1/2 unit.

<sup>&</sup>lt;sup>5</sup>May include hot-briquetted iron, direct-reduced iron, or other specialty product.

<sup>&</sup>lt;sup>6</sup>All or part of these data have been referred to the U.S. Census Bureau for verification.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

TABLE 8 U.S. IMPORTS FOR CONSUMPTION OF PELLETS, BY COUNTRY  $^{\!1}$ 

			2005			2004
	Ma	rch		Year to date		January-March
	Thousand	Value <sup>2</sup>	Thousand	Value <sup>2</sup>	Value <sup>2</sup>	Thousand
Country	metric	(thousand	metric	(thousand	(dollars	metric
of origin	tons	dollars)	tons	dollars)	per ton)	tons
Brazil	351	15,200	840	32,800	39.12	676
Canada	191	11,300	421	20,500	48.70	558
Russia			99	8,550	86.00	
Total	542	26,500	1,360	61,900	45.51	1,230

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

TABLE 9 U.S. IMPORTS FOR CONSUMPTION OF IRON ORE, BY CUSTOMS DISTRICT<sup>1, 2</sup>
(Exclusive of ore containing 20% or more manganese)

# (Thousand metric tons)

	March	January-l	March
Customs district (code no.)	2005	2005	2004
Baltimore, MD (13)	284	870	886
Buffalo, NY (09)	2	3	1
Chicago, IL (39)		26	(3)
Cleveland, OH (41)	23	23	23
Great Falls, MT (33)			(3)
Houston-Galveston, TX (53)			28
Los Angeles, CA (27)		(3)	
Mobile, AL (19)		61	21
New Orleans, LA (20)	538	1,520	965
Nogales, AZ (26)	2	3	(3)
Philadelphia, PA (11)			4
San Francisco, CA (28)		4	
Total	849	2,510	1,930

<sup>&</sup>lt;sup>1</sup>Data, with the exception of the dollars per ton column, are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Customs value. Excludes international freight and insurance charges.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes agglomerates.

<sup>&</sup>lt;sup>3</sup>Less than 1/2 unit.

TABLE 10  $\mbox{U.s. IMPORTS FOR CONSUMPTION OF PELLETS,} \\ \mbox{BY CUSTOMS DISTRICT}^{\mbox{I}}$ 

# (Thousand metric tons)

	March	January-l	March
Customs district (code no.)	2005	2005	2004
Baltimore, MD (13)	167	470	319
Chicago, IL (39)		26	
Cleveland, OH (41)	23	23	23
Houston-Galveston, TX (53)			28
Mobile, AL (19)		61	
New Orleans, LA (20)	351	779	865
Total	542	1,360	1,230

<sup>--</sup> Zero.

 $<sup>^{\</sup>rm 1}{\rm Data}$  are rounded to no more than three significant digits; may not add to totals shown.